

# Notice of Allowability

Application No.

10/713,381

Examiner

Medina A. Ibrahim

Applicant(s)

ALBERTSEN ET AL.

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the response of 08/02/06.
2. ☒ The allowed claim(s) is/are 23, 27-31, 33-37, and 40-43, renumbered as 1-9, 11-12, and 10, respectively.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Patricia Sweeney on 08/30/06.

The application has been amended as follows:

In The abstract:

The abstract has been replaced with the following:

-----The present invention relates to isolated male tissue-preferred regulatory sequences from Ms45 gene. The invention also relates to the use of Ms45 gene male tissue-preferred regulatory sequences in mediating male fertility in a plant, and in producing hybrid seed. The Ms45 male tissue-preferred regulatory region can be operably linked to exogenous genes encoding cytotoxins or inhibitory molecules. The invention also relates to plant cells, plant tissue and plants that contain the MS45 gene regulatory sequences. ----

In The Specification:

At page 1 of the specification, the 1<sup>st</sup> full paragraph ( line 5 to line 7) is replaced with the following:

-This application is a continuation of 09/504, 487, filed 02/15/200, now abandoned, which is a CIP of 08/880, 499, filed 06/23/1997, now US PAT 6, 037, 523--.

At page 9, line 5, ---The ubiquitin regulatory region was active in non-male tissues (Figure 6A), but the Ms45 male tissue-preferred regulatory region was not--- is inserted before the period.

At page 9, line 8, ---(SEQ ID NO: 1 or 2) --- is inserted before the period.

At page 9, lines 10-11, ---, SEQ ID NO: 7---, and ---, SEQ ID NO: 8-- is inserted after the first and second sequences, respectively.

In The Claims:

Claim 23 (Currently amended). An isolated regulatory region [nucleotide sequence] comprising a nucleotide sequence selected from the group consisting of SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5 and SEQ ID NO: 6.

Claim 27 (Currently amended). An expression cassette comprising the isolated regulatory region [nucleotide sequence] of claim 23, wherein said regulatory region [nucleotide sequence] is operably linked to an exogenous nucleic acid sequence [nucleotide].

Claim 29 (Currently amended). The expression vector of claim 28, wherein the vector further comprises a promoter operable linked to the regulatory region, wherein the promoter is selected from the group consisting of [any one of] CaMV35S promoter, SGB6 promoter, SEQ ID NO: 1 [or] , SEQ ID NO: 2 or 5126 promoter.

Claim 30 (Currently amended). The expression vector of claim 28, wherein the exogenous nucleic acid [nucleotide] sequence disrupts male tissue function.

Claim 32 is cancelled.

Claim 33 (Currently amended). A method for preventing male fertility in a plant comprising: introducing into plant cells the expression vector of claim 30 [28, wherein the first exogenous nucleotide sequence disrupts male tissue function], and regenerating the transformed plant cells to a plant, thereby preventing male fertility of the plant.

At claim 35, " nucleotide' is deleted.

Claim 36 is cancelled.

Claim 37 (Currently amended). A method of producing a male fertile hybrid plant comprising cross-fertilizing the male sterile plant of claim 43 [34] with a second plant comprising a second exogenous nucleic acid [nucleotide] sequence encoding a protein that prevents the expression of the first exogenous [nucleotide] sequence encoding a protein that disrupts male tissue function, thereby producing a male fertile hybrid plant.

Claims 38-39 are cancelled.

Claims 41-42 are cancelled.

Claim 43 (New). A male sterile plant produced by the method of claim 34.

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**Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Medina A. Ibrahim whose telephone number is (571) 272-0797. The Examiner can normally be reached Monday -Thursday from 8:00AM to 5:30PM and every other Friday from 9:00AM to 5:00 PM . Before and after final responses should be directed to fax nos. (703) 872-9306 and (703) 872-9307, respectively.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Anne Marie Grunberg, can be reached at (571) 272-0975.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

8/30/06

Mai

MEDINA A. IBRAHIM  
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'Medina A. Ibrahim', is written over the printed name and title.